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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,578

07/25/2003

Christian Bohris

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EXAMINER

LAMPRECHT, JOEL

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/627,578	Applicant(s) BOHRIS, CHRISTIAN	
	Examiner JOEL M. LAMPRECHT	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-140 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-140 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/26/06, 5/25/06, 7/2/08, 3/20/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mourad et al (US 6,875,176 B2) in view of Wurster et al (US 5,144,953). Mourad et al disclose an ultrasound system for evaluation of displacement based acoustic properties of tissues in a focal region including the evaluation of a correlation coefficient as a temporal measure of tissue attenuation and wave propagation (Figure 3, Col 25 Line 18-Col 26 Line 55), imaging of tissue regions with a probe-based scanner (Col 34 Line 1-25), evaluation of reference and actual values of correlation coefficients including temporal correlation and relaxation values of tissues over time (Col 6 line 55-61, Col 29 Line 10-Col 30 Line 30, Col 37 Line 20-Col 38 Line 50). Mourad et al disclose a concurrent transmit/receiving unit (Col 33 Line 45-Col 34 Line 25), for diagnostic ultrasound and a shockwave generator for pushing pulses (Col 33 Line 45-Col 34 Line 25). Mourad et al also disclose thresholding values for the cessation of therapy if a certain value is indicated as abnormal via an alarm mode (Col 43 Line 20-Col 44 Line 35) as well as standardization to a reference value (Col 41 Line 15-58). Furthermore, Mourad et al disclose a method of measuring relaxation of tissue to a standard curve to relate to the thresholding properties of the correlation coefficient (Col 36 Line 30-Col 37

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Line 20). Finally, Mourad et al disclose a display means for displaying correlation coefficient data, auto regulation data, statistical processes for discerning local maxima, minima, averaging, and other properties for analysis of the tissue in the region of interest, as well as concurrent display for localized properties of interrogated tissues (Claim 5, Fig 8, Col 43 Line 20-Col 44 Line 55, Col 33 Line 45-Col 34 Line 25, Col 38 Line 5-Col 40 Line 55).

Mourad et al do not disclose the use of a lithotripter in the sense of an ESWL device, rather they disclose an ultrasound pulse emitter for displacement of tissue and a diagnostic unit for assessment of that treatment or diagnostic therapy. Conventional shock wave lithotripsy uses extremely similar values and principles to perform lithotripsy on an affected tissue (the values of the pushing pulses are higher) and therefore attention is directed to the secondary reference to Wurster et al which discloses the use of a lithotripter in combination with an x-ray device for location and alignment of targeted tissue regions of the body (Abstract). Wurster et al disclose imaging integration with acoustic therapy for performing lithotripsy on concretions within the body (Col 3 Line 30-Col 4 Line 60). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the device and methods of Mourad et al for diagnostic assessments of acoustic therapy with the lithotripsy methods and apparatus of Wurster et al for the purpose of facilitating monitoring and control of a similar acoustic wave therapy procedure within the body.

Mourad et al do not specifically disclose every limiting evaluation which can be performed to assess the therapeutic procedure, they rather focus on physiological

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effects of particular values diagnostically. It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the data output in claims 5-7, 17-19, 26, 27, 31-33, and the associated disclosures mentioned above to optimize a therapy and create particular threshold values for the alarm device of Col 43 Line 20- Col 44 Line 35 as optimization of a parameter of a diagnostic procedure has been held as requiring only nominal skill in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on 8:30-5:00 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/
Supervisory Patent Examiner, Art
Unit 3737

JML